



AGENCY FLEET EXECUTABLE PLANS

Section 142 of EISA requires Federal agencies to develop an executable plan to meet the petroleum reduction and alternative fuel use requirements.

The plan should identify the measures the agency will use and provide projections of the vehicle fleet inventory and composition, annual reductions in petroleum use, and annual increases in alternative fuel use.



Getting Started

A Guide to Creating a Compliance Strategy

Federal fleets must reduce fossil fuel use, increase use of alternative fuels, and promote use of sustainable alternative energy sources. Here's an outline to help you develop a compliance strategy for your agency.

GETTING STARTED

The overall goal for all agencies in managing their fleets is to minimize petroleum use, either through increasing alternative fuel use, increasing vehicle efficiencies, or other measures. To make greater progress toward this goal, each agency must implement a clear petroleum reduction strategy with specific, attainable goals. This guide will help you navigate the maze of requirements by defining what you need to do, and by providing the tools you need in order to develop a successful strategy.

BACKGROUND

What Do I Need to Do?

The ultimate fleet management goal for all Federal agencies is to reduce petroleum consumption. The Federal government has made progress in improving fleet environmental and energy performance through the following statutes and executive order: the Energy Policy Act (EPA) of 1992, EPA 2005, Executive Order (E.O.) 13423, the Energy Independence and Security Act (EISA) of 2007, and the National Defense Authorization Act (NDAA) of 2008. This legislation prescribes the following fleet management, alternative fuel use, and petroleum reduction mandates applicable to most Federal agency fleets.



- **Petroleum reduction and alternative fuel use**

E.O. 13423 requires that Federal agencies with 20 or more vehicles decrease annual petroleum consumption by 2 percent per year through fiscal year (FY) 2015 compared to a FY 2005 baseline. Federal agencies must also increase annual alternative fuel use by 10 percent each year compared to the previous year (starting at the FY 2005 baseline).

EISA includes language similar to E.O. 13423. At press time, the DOE was conducting a rulemaking to clarify these requirements.

- **Alternative fuel vehicle acquisition**

EPA 1992 mandates that 75 percent of light-duty vehicle (LDV) acquisitions by Federal agencies be alternative fueled vehicles (AFVs). These requirements apply to agency fleets of 20 or more LDVs that are centrally fueled and operated in a metropolitan statistical area/consolidated metropolitan area (MSA/CMSA).

Section 2862 of NDAA 2008 amended EPA 1992 by adding several new vehicles to the definition of "alternative fueled vehicles," including hybrid electric vehicles (HEVs).

E.O. 13423 also requires that Federal agencies acquire plug-in hybrid electric vehicles (PHEVs) when commercially available and cost effective.

- **Acquisition of low greenhouse gas emitting vehicles**

Section 141 of EISA prohibits Federal agencies from acquiring LDVs and medium-duty passenger vehicles that are not low greenhouse gas (GHG)-emitting vehicles. EPA is currently developing guidance to assist agencies in complying with this requirement.

- **Use of alternative fuel in AFVs**

Section 701 of EPACT 2005 mandates that Federal dual-fueled AFVs operate on alternative fuels unless granted a waiver by DOE due to the local unavailability of alternative fuel or if the fuel is more expensive per gallon than gasoline.

- **Alternative fuel infrastructure at Federal fleet fueling centers**

Section 246 of EISA requires Federal agencies to install at least one renewable fuel pump (E85 or biodiesel) at each Federal fleet fueling center by 2010. DoD fueling centers with annual use of less than 100,000 gallons are exempt from this requirement.

- **Executable plans**

Under EISA Section 142, each covered Federal agency is required to develop an executable plan to meet the annual petroleum reduction and alternative fuel increase milestones and FY 2015 requirements. DOE is currently developing guidance to assist agencies in complying with this requirement.

Making Progress

Federal fleets have reduced petroleum consumption 4.5 percent from 2005 to 2008, and increased alternative fuel use more than 63 percent during this same time frame. The 4.5 percent decrease is 1.5 percent short of the E.O. 13423 requirement, while the 63 percent increase exceeds the alternative fuel use increase requirement by 30 percent.

THE SIX-PILLAR STRATEGY

How Do I Meet and Exceed these Requirements?

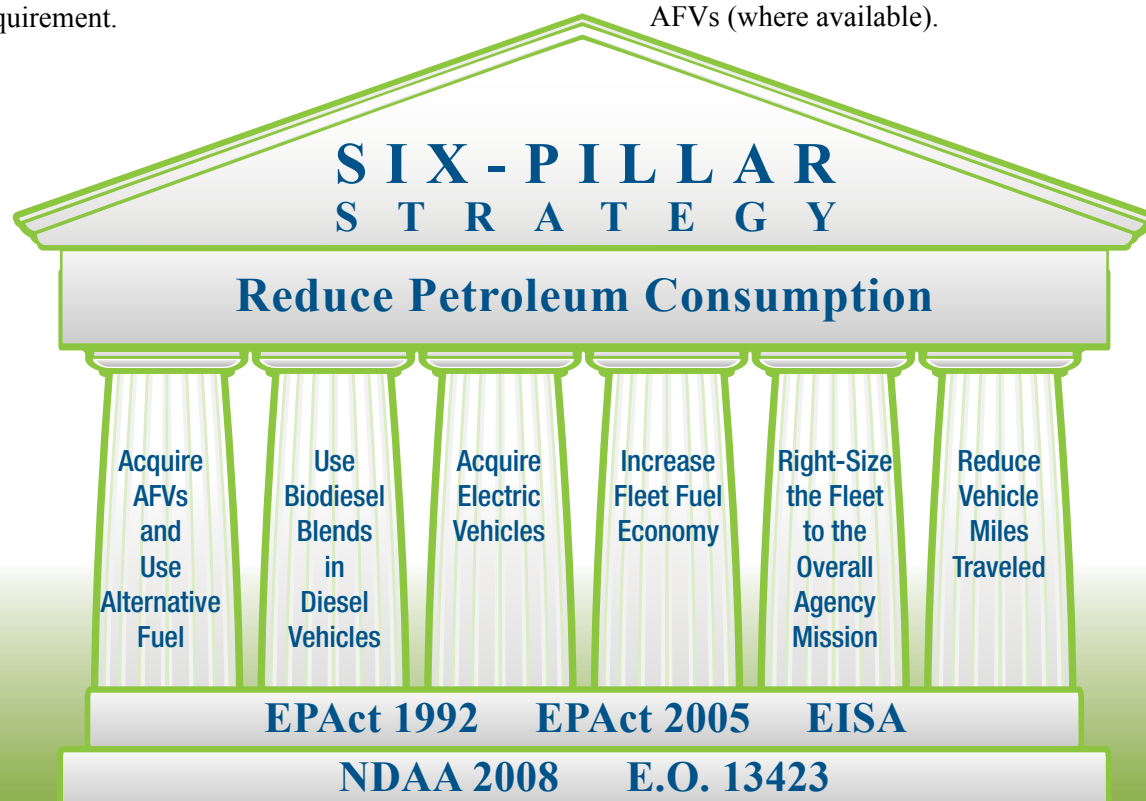
In order to develop a strategy that meets mission-critical needs and complies with all Federal goals and mandates, your agency may want to consider a strategy comprised of six key components. These components, or “Pillars” provide a framework for agencies when developing a general strategy that can be specifically tailored to meet your agency profile.

PILLAR I

Acquire AFVs and Use Alternative Fuel

Maximize the displacement of petroleum with alternative fuel at fleet locations where alternative fuel is currently available or high-use locations where alternative fuel is not available. This strategy consists of three elements:

1. Install alternative fuel infrastructure at fleet locations that can justify more than 100,000 gasoline gallon equivalent (GGE) of alternative fuel use.
2. Maximize the composition of AFVs in the fleet at locations with existing or planned alternative fuel infrastructure.
3. Optimize use of alternative fuel in dual-fueled AFVs (where available).





For fleet locations without existing alternative fuel infrastructure and which are not candidates for new infrastructure, the strategy is not to install new alternative fuel infrastructure and not to purchase new AFVs.

PILLAR II

Use Biodiesel Blends in Diesel Vehicles

Maximize the displacement of diesel with biodiesel blends (i.e., B20) at fleet locations where B20 is currently available or high-use locations where B20 is not available. This strategy consists of three elements:

1. Install B20 infrastructure at fleet locations that can justify more than 100,000 GGE of B20 fuel use.
2. Replace medium- and heavy-duty gasoline vehicles with diesel vehicles at locations with existing or planned B20 infrastructure.
3. Optimize use of B20 in diesel vehicles (where available).

PILLAR III

Acquire Electric Vehicles

Replace gasoline vehicles with electric vehicles, which are powered primarily by an electric motor that draws current from portable sources of electricity. This definition includes electric powered Low-Speed Vehicles (LSVs), such as Neighborhood Electric Vehicles (NEVs), which are 4-wheeled motor vehicles weighing less than 3,000 pounds with top speeds of 20 to 25 miles per hour.

Electric vehicles have the potential to significantly reduce an agency's petroleum consumption where fleet vehicles are used primarily to support campus-type operations, have low daily vehicle miles traveled (VMT), and have daily (or overnight) access to electricity for recharging.

PILLAR IV

Increase Fleet Fuel Economy

Increase the overall fuel efficiency of agency fleets (and subsequently reduce petroleum use) through the following measures:

- ♦ Replace gasoline light-duty SUVs and sedans with HEVs. The fuel use of some HEVs is estimated to be



AFDC PETROLEUM REDUCTION PLANNING TOOL

The AFDC Petroleum Reduction Planning Tool helps fleet managers create a strategy to reduce petroleum use in fleet vehicles. This interactive tool allows users to evaluate and calculate petroleum reductions by choosing one or a combination of the following methods: alternative fuels, biodiesel blends, HEVs, fuel economy, VMT reduction, truck stop electrification, onboard idle reduction, and idling time reduction.

The Petroleum Reduction Planning Tool is available on the AFDC website at <https://www.afdc.energy.gov/afdc/prep/index.php/>

30 percent less than similar non-hybrid gasoline vehicles.

- ♦ Right-size each fleet to its intended mission.
- ♦ Substitute cars for light trucks.
- ♦ Replace older vehicles with newer, more fuel efficient vehicles.
- ♦ Focus on increasing the fuel efficiency of medium- and heavy-duty vehicles.

PILLAR V

Right-Size the Fleet to the Overall Agency Mission

Acquire vehicles to ensure that the vehicle supply corresponds with the demand required to support the agency mission. This includes reviewing and optimizing both the utilization of existing vehicles and the composition of vehicle sizes and types.

PILLAR VI

Reduce Vehicle Miles Traveled

Reduce agency fuel consumption by implementing the following measures to reduce VMT:

- ♦ Consolidate trips.
- ♦ Use video- and web-conferencing tools for meetings.
- ♦ Take advantage of mass transportation and agency shuttles.

REPORTING & COMPLIANCE

Annual Reports. Federal agencies must prepare and submit to Congress by February 15th of each year annual reports on compliance with vehicle acquisition, petroleum consumption, and alternative fuel consumption requirements. The agency is to make these reports public by placing

them on the Internet and by publishing their availability in the Federal Register.

Federal Automotive Statistical Tool

(FAST). The FAST system assists fleets in meeting the data reporting requirements of E.O. 13423, EPCA 1992, EPCA 2005, and EISA, including management of vehicle acquisition and inventory, mileage, and fuel consumption data (by fuel type).

CULTURAL CHANGE

Successful implementation of any compliance strategy hinges on the human element to bring about behavioral change. Reaching these goals requires cultural changes and modifications in behavior.

When implementing a compliance strategy, remember to include these key elements:

- **Education and Training**

Properly trained managers, drivers, and technical personnel are fundamental to identifying opportunities, developing plans and programs, and tracking progress.

- **Awards and Incentives**

Promptly recognizing and rewarding exceptional performers can inspire others to change their behavior. Awards generate support and pride within an organization and foster continued success.

- **Continuous Communications**

Successfully executing any strategic plan requires continuous communication to both internal and external audiences: 1) where we are; 2) where we're headed; and 3) how we're going to get there.

CONCLUSION

Federal agencies must begin by creating a strategy in order to produce significant reductions in petroleum consumption, and accelerate the use of alternative fuels.

Implementing these steps will increase our energy independence and enhance our energy security. It can also save money—money that can be used in other ways to support the mission of your agency.

U.S. DEPARTMENT OF ENERGY

Energy Efficiency & Renewable Energy

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